

UK Patent Application (19) GB (11) 2 241 863(13) A

(43) Date of A publication 18.09.1991

- (21) Application No 9105479.1
- (22) Date of filing 15.03.1991
- (30) Priority data
 - (31) 02026616
- (32) 15.03.1990
- (33) JP

- 02026617 02026618
- (71) Applicant Asahi Denka Kogyo Kabushiki Kaisha

(Incorporated in Japan)

2-35, Higashiogu 7-chome, Arakawa-ku, Tokyo, Japan

- (72) Inventors Toshihiro Hayashi Satoru Takeda Shyoichiro Yamazaki Masayuki Sugle Norio Iwaki
- (74) Agent and/or Address for Service Kilburn and Strode 30 John Street, London, WC1N 2DD, United Kingdom

- (51) INT CL* A21D 6/00 // A21D 13/00
- (52) UK CL (Edition K) A2B BMP1 A2A A2
- (56) Documents cited US 4780329 A US 4717328 A US 4046920 A
- (58) Field of search UK CL (Edition K) A2A A1 A2, A2B BMB19 BMB31 BMB39 BMP1 BMP5 INT CL5 A21C, A21D, A23P

(54) Pies; rolled ples

(57) An uncooked pie (A) comprises an edible filling (2) rolled around which is a layer of dough (1). Formed in the dough over substantially its entire surface area is a plurality of slits (3). The filling (2) may optionally be contained within an edible film to prevent leakage.



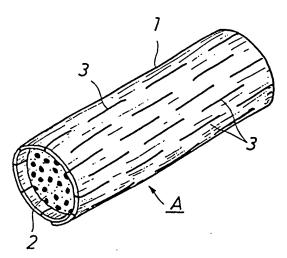


FIG.1

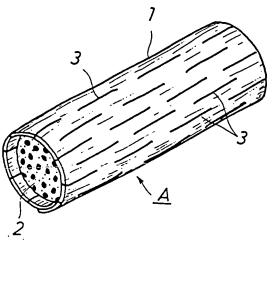


FIG. 2

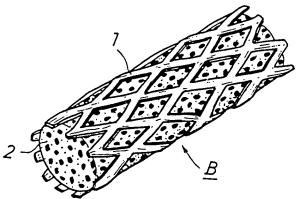


FIG.3

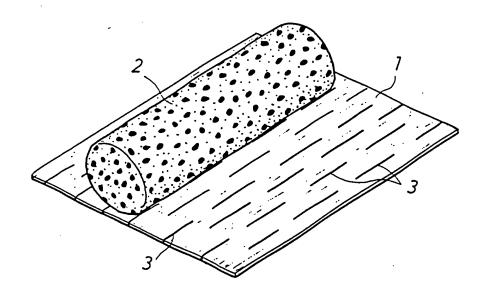


FIG.4

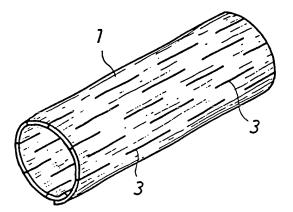
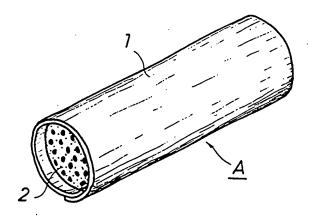


FIG.5



FIG·6

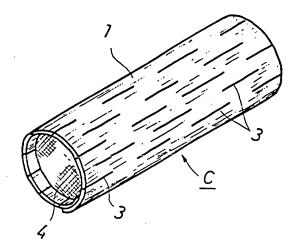


FIG.7

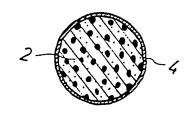
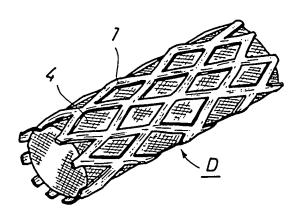


FIG ·8



PIES

The invention relates to pies comprising edible dough of pastry, bread or cracker type within which there are ingredients or an edible filling.

Various types of pies are known including those of rolled configuration in which the filling, which may be meat, fruit or the like, has a layer of dough rolled around it and is subsequently baked. It is known to provide such pies with a plurality of slits or elongate cuts in a portion of the dough, typically on the upper surface of the pie, in order to prevent the filling from being ejected from one or both ends of the pie during baking due to the generation of steam from the filling.

However, even if such slits are provided there is still the problem that steam generated from the filling tends not only to expel the filling from the ends of the pie but also to penetrate into the crust of the pie thereby impairing the transfer of heat through it. As a result, the heat transfer is sometimes non-uniform or inadequate, particularly at the bottom of the pie, which results in its having an unpleasant or soggy texture and in the eater gaining the impression that the pie is not properly cooked. It has therefore previously been necessary to reduce the water content of the filling to as great an extent as possible.

Furthermore, if the filling is very moist, or becomes liquid when heated, e.g. it contains cheese or a sauce, the liquid and/or filling itself tends to leak out of

the ends of the pie and/or out of the slits. It has therefore previously been difficult or impossible to use this type of filling.

It is therefore an object of the invention to provide an uncooked pie in which the above mentioned problems are obviated. More specifically, it is an object of the invention to provide an uncooked pie including dough of pastry, bread or cracker type in which the transfer of heat is excellent at all positions, including the bottom of the pie, when it is being baked and which, when cooked, has a satisfactory "bite" or texture. It is a further object of the invention to provide an uncooked pie including dough in which slits are formed which is capable of satisfactorily containing a very moist filling or a filling which becomes liquid when heated.

According to the present invention an uncooked pie comprises an edible filling rolled around which is a layer of dough, e.g. of pastry, bread or cracker type, slits being cut into the dough over its entire surface area.

The dough may be of a wide variety of types and the filling may also vary widely and may be very moist foodstuffs such as sweet potato, salad, meat and the like. In the event that the filling is very moist or becomes liquid when heated, it is preferred that it is contained within an edible film and then surrounded by the layer of dough. A wide variety of edible films may be used and it is preferred that this film or layer is thinner than the layer of dough. The edible film may

be, for instance, of crepe, Harumaki (Chinese food), Gyoza (fried dumpling stuffed with minced pork), dried bean curd, a collagen film or a polysaccharide.

The invention also embraces an uncooked pie of the type described above after it has been cooked and this will of course convert the dough into a crust. This crust will also have slits formed in it or alternatively the slits may open up during baking into apertures. In any event, the slits or apertures will be disposed over the entire surface of the crust.

Uncooked pies in accordance with the invention can conveniently be frozen and stored, transported and distributed in the frozen state and then subsequently thawed and baked to produce a cooked pie in whose crust slits or apertures are formed.

Since the layer of dough around the pie in accordance with the present invention is provided with slits over its entire surface area, even if the filling is a moist one the steam or water vapour which is produced during baking discharges through the slits which tend to open up under the action of heat. The transfer of heat through the base of the pie is thus improved and the base of the pie is properly cooked and has an acceptable or crisp texture.

Even if the slits enlarge to form a mesh pattern during baking, leakage of the filling through the apertures can be prevented by the provision of the edible film and the filling can thus comprise a very moist foodstuff or a foodstuff which becomes liquid when heated, such as sauce or cheese.

Further features and details of the invention will be apparent from the following description of certain specific embodiments which is given by way of example with reference to the accompanying drawings, in which:

Figure 1 is a perspective view of one embodiment of an uncooked pie in accordance with the invention;

Figure 2 is a perspective view of the pie of Figure 1 after it has been baked in an over;

Figure 3 is a perspective view of the pie of Figure 1 prior to rolling the layer of dough around it;

Figure 4 is a perspective view of the layer of dough of the pie of Figure 1 which has been rolled up into a cylindrical configuration in the absence of the filling;

Figure 5 is a perspective view of a layer of dough after the insertion of the filling and prior to the formation of the slits;

Figure 6 is a view similar to Figure 1 of a further embodiment of pie in accordance with the invention in which the filling is enclosed within an edible film; Figure 7 is a transverse sectional view of the filling and edible film of the pie of Figure 6; and Figure 8 is a perspective view of the pie of Figure 6 after it has been baked in an oven.

Figure 1 shows an uncooked pie A comprising a filling 2 around which is rolled a layer of pastry dough 1 in which a plurality of slits or elongate cuts are formed over its entire surface. Figure 2 shows a cooked pie B

which is obtained by baking a pie A in an oven. As may be seen, the slits 3 have enlarged during baking to form a mesh pattern.

The pie A may be made by the method shown in Figure 3 in which the filling is placed on the layer of dough 1, in which slits 3 are formed and which is then rolled up around the filling to surround it. Alternatively, the pie A may be made by a method which is illustrated in Figure 4 in which the slit layer of dough 1 is rolled up into a cylindrical shape whereafter the filling 2 is forced into it.

The slits 3 may be formed in the layer of dough 1 prior to rolling it up, as shown in Figure 3, or prior to rolling it up and introducing the filling, as shown in Figure 4, or alternatively they may be formed after the dough has been rolled around the filling, that is to say slits may be formed in an otherwise finished pie of the type shown in Figure 5.

Referring now to Figures 6 to 8, the second embodiment of uncooked pie C includes a filling 2 totally enclosed within an edible film 4, around both of which the layer of dough 1 with slits 3 is rolled. The filling 2 is enclosed within the film 4, as shown in Figure 7, prior to rolling the dough around it or alternatively the filling within the edible film may be inserted into a pre-rolled layer of dough, as illustrated in Figure 4. Figure 8 shows a cooked pie D which is produced by baking the pie C in an oven. As may be seen, the slits 3 have again become enlarged to form a mesh pattern.

В

The size of the pie may vary widely, depending on taste and the filling, but it is preferred that its length is in the range of 8 or 10cm to 12 or 13cm and that the layer of dough is somewhat longer than the filling. The thickness of the layer of dough is preferably 1.5 to 3.0mm and the diameter of the pie is preferably 2.0 to 3.5cm.

The cuts or slits in the layer of dough may be arranged in any suitable configuration. It is however preferred that they extend generally parallel to the length of the roll in a plurality of straight lines, the slits in one line being offset from those in the adjacent line whereby a continuous mesh or diamond-shaped lattice is formed after baking. More specifically, the cuts are preferably 1.5 to 3.5cm long and there are preferably between 2 and 5 cuts in each line extending in the direction of the length of the roll with a spacing between adjacent cuts in each line of between 0.7 and The distance in the peripheral direction 1.3cm. between adjacent lines of cuts is preferably between 0.2 and 1.2cm and there are preferably between 8 and 14 lines of cuts.

The filling in the pie may be of the same type as that which has previously been used but a filling of sweet potatoes, pumkins, bean jams, salad materials, processed foodstuffs such as gratin sauces and curries, creams (custards, flour pastes and the like) and jams is particularly preferred.

The above description relates to a pie in which the dough is of pastry type but the dough could equally be

of bread type. However, in this event the thickness of the bread dough is preferably from 3.0 to 10mm.

CLAIMS

- 1. An uncooked pie comprising an edible filling rolled around which is a layer of dough, slits being cut into the dough over its entire surface area.
- 2. A pie as claimed in claim 1 in which the edible filling is enclosed within an edible film.
- 3. A pie as claimed in claim 1 or claim 2 which is frozen.
- 4. A pie as claimed in any one of the preceding claims in which the dough is pastry dough.
- 5. A pie as claimed in any one of claims 1 to 3 in which the dough is bread dough.
- 6. A pie as claimed in any one of claims 1 to 3 in which the dough is cracker dough.
- 7. A cooked pie comprising a pie as claimed in any one of the preceding claims which has been cooked thereby converting the dough into a crust.
- 8. An uncooked pie substantially as specifically herein described with reference to Figure 1 or Figure 6 of the accompanying drawings.